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PATENT
Attorney Docket No. 213338
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Murakami et al.

Art Unit: 1713

Application No. 09/941,972

Examiner: J. M. Reddick

Filed: August 29, 2001

For: ADHESIVE COMPOSITION FOR SKIN
AND ADHESIVE TAPE OR SHEET FOR
SKIN COMPRISING COMPOSITION

APPELLANTS' CORRECTED APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Non-Compliance with 37 C.F.R. § 1.192(c), and in support of the appeal from the final rejection dated December 27, 2002, Appellants submit this Appeal Brief. The Notification of Non-Compliance with 37 C.F.R. § 1.192(c) was mailed from the U.S. Patent and Trademark Office on August 21, 2003, thereby making the corrected Appeal Brief due on September 22, 2003. The Notice of Appeal was filed on April 24, 2003, and received by the U.S. Patent and Trademark Office on April 30, 2003, and the original Appeal Brief was filed on June 2, 2003. The only differences between this corrected Appeal Brief and the originally filed Appeal Brief pertain to the procedural matters recited in the Notice of Non-Compliance with 37 C.F.R. § 1.192(c).

Real Party In Interest

The patent application that is the subject of this appeal is assigned to Nitto Denko Corporation.

Related Appeals and Interferences

There are no appeals or interferences that are related to this appeal.

Status of Claims

Claims 1-16 are rejected and are the subject of this appeal. Claims 17-26 were canceled by Appellants. Claims 1-16 are set forth in the Appendix attached hereto.

Status of Amendments

The proposed amendments to claims 7 and 15 made in the "Response to [Final] Office Action" dated February 27, 2003, were entered by the Office.

Summary of Invention

The invention pertains to an adhesive composition for application to skin. The adhesive composition of the invention comprises:

- (1) an acrylic copolymer (100 parts by weight) obtained from a monomer mixture containing three components:
 - (A) a (meth)acrylic acid alkyl ester monomer (40-80 wt.%),
 - (B) an alkoxy group-containing ethylenically unsaturated monomer (10-60 wt.%), and
 - (C) a carboxy group-containing ethylenically unsaturated monomer (1-10 wt.%), and
- (2) a carboxylic acid ester (20-120 parts by weight, which is liquid or paste at room temperature,

wherein the acrylic copolymer has a gel fraction of 30-80 wt.% or 20-60 wt.% (see, e.g., specification page 4, lines 20-30, and page 5, lines 1-11). When an acrylic copolymer prepared from a monomer mixture of all three components (namely components (A), (B), and (C) as set forth above) is used to prepare an adhesive composition, the resulting adhesive composition has a high moisture permeability allowing skin to remain dry and allowing the adhesive composition to remain adhered to skin that is wet with perspiration (see, e.g., specification page 4, lines 6-17). Additionally, such an adhesive composition reduces irritation to the skin (see, e.g., specification page 4, lines 6-17).

Issues

The issue on appeal is whether or not claims 1-16 are anticipated under 35 U.S.C. § 102(b) or, in the alternative, obvious under 35 U.S.C. § 103(a), in view of Shirai et al. (U.S. Patent 5,543,151).

Grouping of Claims

Appealed claims 1-16 stand or fall together.

Argument

The Examiner contends that the Shirai reference anticipates the adhesive preparation of the present invention in content and character, since the components of the adhesive preparation of the Shirai reference overlap in scope with the components of the claimed adhesive preparation (see page 2 of Office Action dated December 27, 2003). Specifically, the Office contends that the Shirai reference teaches all the elements of the pending claims (see page 4 of Office Action dated April 2, 2002).

As indicated in the "Summary of Invention" above, the adhesive composition of the invention comprises (1) an acrylic copolymer and (2) a carboxylic acid ester. Component (1) of the adhesive composition of the invention is an acrylic copolymer obtained from a monomer mixture of three components: (A) a (meth)acrylic acid alkyl ester monomer, (B) an alkoxy group-containing ethylenically unsaturated monomer, and (C) a carboxy group-containing ethylenically unsaturated monomer.

As regards component (1), the Shirai reference discloses an adhesive composition comprising an acrylic polymer (see column 1, line 60 – column 2, line 9). As regards component (2), the Shirai reference discloses that the adhesive composition can additionally comprise a component that is in a liquid or pasty state at room temperature, such as an ester of an unsaturated fatty acid or a branched fatty acid (see column 2, lines 17-29). The acrylic polymer can be "a polymer or a copolymer comprising a (meth)acrylic acid ester as a main component, if necessary, copolymerized with a monomer copolymerizable with the (meth)acrylic acid ester" (see column 2, lines 34-38). The Shirai reference recites, in a long list, numerous monomers that can be copolymerizable with the (meth)acrylic acid alkyl ester (corresponding to component (A)) (see column 2, line 53 - column 3, line 15). The monomers recited in the long list of the Shirai reference include an alkoxy group-containing ethylenically unsaturated monomer (corresponding to component (B)) and a carboxy group-containing ethylenically unsaturated monomer (corresponding to component (C)). Thus, the Shirai reference discloses many individual components that conceivably could be mixed and matched to form an acrylic copolymer, and indeed the Shirai reference indicates that the monomers can be used alone or as mixtures (see column 3, lines 16-17).

While the Shirai reference discloses the individual components (A), (B), and (C) that can be combined to form the acrylic copolymer (1) of the adhesive composition of the present invention, the Shirai reference does not specifically disclose an acrylic copolymer obtained from all three components (A), (B), and (C), as recited in the appealed claims. Based on the long list of monomers that can be copolymerized with a (meth)acrylic acid ester as disclosed by the Shirai reference, and consequently the many possible permutations and combinations of

components resulting in an acrylic copolymer, one of ordinary skill in the art would *not* consider that the Shirai reference actually *discloses* the particular acrylic copolymer obtained from the combination of components (A), (B), and (C) as recited in the appealed claims. Under the circumstances, the present invention cannot properly be considered to have been anticipated by the Shirai reference.

In addition, there is nothing in the Shirai reference that would direct or motivate one of ordinary skill in the art to single out the specific monomers (B) *and* (C) to combine with component (A) in order to provide an acrylic copolymer (1) as recited in the appealed claims, which then still needs to be combined with a carboxylic acid ester (2) that is liquid or paste at room temperature to form an adhesive composition defined by the appealed claims. Thus, after reading the Shirai reference, one of ordinary skill in the art would not be motivated to pick and choose the particular monomers among the numerous monomers listed in column 2, line 53 – column 3, line 14, that would allow for the preparation of the adhesive composition of the present invention. The only way in which the Shirai reference can be considered to teach or suggest the acrylic copolymer obtained from the combination of components (A), (B), and (C) and its combination with a carboxylic acid ester to form an adhesive composition is through the use of impermissible hindsight, i.e., with the knowledge of the present application and the invention as claimed therein. The use of such hindsight, of course, cannot serve as a proper basis for an obviousness rejection.

The unobviousness of the invention defined by the appealed claims is further evidenced by benefits attendant the present invention and the failure of the Shirai reference to disclose or suggest how to achieve those benefits in an adhesive composition by the selection of the particular components needed to provide the present invention.

The present invention provides an adhesive composition having superior adhesion to the skin during perspiration (see, e.g., specification page 2, lines 19-22) by imparting hydrophilicity to the acrylic polymer and vapor permeability and hygroscopicity to the adhesive composition. Specifically, the present invention requires the use of an alkoxy group-containing ethylenically unsaturated monomer (B) as an essential component in the adhesive composition in order to improve adhesion to the skin during excessive perspiration.

The Shirai reference does not disclose or suggest the importance of including an alkoxy group-containing ethylenically unsaturated monomer (B) along with components (A) and (C) to form an acrylic copolymer for use in preparing an adhesive composition. In that respect, moreover, none of the examples disclosed by the Shirai reference provides an acrylic copolymer prepared from three different types of monomers of any type, let alone an acrylic copolymer prepared from the particular three components (A), (B), and (C) to be combined with a carboxylic acid ester (2) to form the present inventive adhesive composition. Indeed, the

In re Appln. of Murakami et al.
Application No. 09/941.972

Shirai reference does not even describe or suggest the problems associated with using an adhesive composition during excessive perspiration or aim at solving these problems.

In view of the failure of the Shirai reference to direct one of ordinary skill in the art to the particular combination of elements necessary to arrive at the present invention, and in view of the unexpected properties attendant the particular combination of elements of the present invention, the appealed claims must be considered to define subject matter that is unobvious over the Shirai reference.

Conclusion

For the foregoing reasons, Appellants respectfully request the reversal of the rejections of the subject patent application.

Respectfully submitted,


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Date: September 2, 2003

APPENDIX

1. An adhesive composition for application to skin, which comprises an acrylic copolymer (100 parts by weight) obtained from a monomer mixture comprising a (meth)acrylic acid alkyl ester monomer (40-80 wt%), an alkoxy group-containing ethylenically unsaturated monomer (10-60 wt%) and a carboxy group-containing ethylenically unsaturated monomer (1-10 wt%), and a carboxylic acid ester (20-120 parts by weight), which is liquid or paste at room temperature, wherein the acrylic copolymer has a gel fraction of 30-80 wt%.
2. The adhesive composition for application to skin according to claim 1, wherein the carboxylic acid ester is a glycerine ester of saturated fatty acid.
3. The adhesive composition for application to skin according to claim 2, wherein the saturated fatty acid has 8 to 10 carbon atoms.
4. The adhesive composition for application to skin according to claim 3, wherein the saturated fatty acid having 8 to 10 carbon atoms is selected from the group consisting of a caprylic acid, a capric acid and a 2-ethylhexanoic acid.
5. The adhesive composition for application to skin according to claim 2, wherein the glycerine ester is a triglycerine ester.
6. The adhesive composition for application to skin according to claim 2, wherein the glycerine ester of saturated fatty acid is selected from the group consisting of triglyceryl caprylate, triglyceryl caprate and triglyceryl 2-ethylhexanoate.
7. The adhesive composition for application to skin according to claim 1, wherein the adhesive composition is chemically crosslinked.
8. The adhesive composition for application to skin according to claim 7, wherein the chemical crosslinking is performed using an organic compound selected from the group consisting of an organic peroxide, an isocyanate compound, an epoxy compound and a metal chelate compound.

9. An adhesive composition for application to skin comprising an acrylic copolymer (100 parts by weight) obtained from a monomer mixture comprising a (meth)acrylic acid alkyl ester monomer (40-80 wt%), an alkoxy group-containing ethylenically unsaturated monomer (10-60 wt%) and a carboxy group-containing ethylenically unsaturated monomer (1-10 wt%) and

a carboxylic acid ester (20-120 parts by weight), which is liquid or paste at room temperature,

wherein the acrylic copolymer has a gel fraction of 20-60 wt%.

10. The adhesive composition for application to skin according to claim 9, wherein the carboxylic acid ester is a glycerine ester of saturated fatty acid.

11. The adhesive composition for application to skin according to claim 10, wherein the saturated fatty acid has 8 to 10 carbon atoms.

12. The adhesive composition for application to skin according to claim 11, wherein the saturated fatty acid having 8 to 10 carbon atoms is selected from the group consisting of a caprylic acid, a capric acid and a 2-ethylhexanoic acid.

13. The adhesive composition for application to skin according to claim 10, wherein the glycerine ester is a triglycerine ester.

14. The adhesive composition for application to skin according to claim 10, wherein the glycerine ester of saturated fatty acid is selected from the group consisting of triglyceryl caprylate, triglyceryl caprate and triglyceryl 2-ethylhexanoate.

15. The adhesive composition for application to skin according to claim 9, wherein the adhesive composition is chemically crosslinked.

16. The adhesive composition for application to skin according to claim 15, wherein the chemical crosslinking is performed using an organic compound selected from the group consisting of an organic peroxide, an isocyanate compound, an epoxy compound and a metal chelate compound.

MATTERS HANDLED CONCURRENTLY WITH APPEAL

The Office does not acknowledge receipt of a notice of appeal by separate letter. However, if a self-addressed postcard is included with the notice of appeal, it will be date stamped and mailed.

Form paragraphs 12.01-12.04 may be used to indicate defects in a notice of appeal

¶ 12.01 Notice of Appeal Unacceptable - Fee Unpaid

The notice of appeal filed on [1] is not acceptable because the appeal fee required under 37 CFR 1.17(b) was not filed, or was not timely filed.

Applicant may obtain an extension of time under 37 CFR 1.136(a) to file the appropriate appeal fee. The date on which the notice of appeal, the appeal fee, the petition under 37 CFR 1.136(a), and the petition fee are filed will be the date of the reply and also the date for determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply later than the maximum SIX MONTH statutory period or obtain an extension pursuant to 37 CFR 1.136(a) for more than FIVE MONTHS beyond the date of reply set in an Office action.

¶ 12.02 Notice of Appeal Unacceptable - No 2nd Rejection

The notice of appeal filed on [1] is not acceptable under 37 CFR 1.191(a) because [2].

Examiner Note

In bracket 2, insert the following wording, as appropriate:

--there has been no second or final rejection in this patent application--;

--there has been no second or final rejection in this *ex parte* reexamination proceeding on a patent that issued from an original application filed in the United States before November 29, 1999--; or

--there has been no final rejection (37 CFR 1.113) of the claims in this *ex parte* reexamination proceeding on a patent that issued from an original application filed in the United States on or after November 29, 1999--.

¶ 12.03 Notice of Appeal Unacceptable - Not Timely Filed

The notice of appeal filed on [1] is not acceptable because it was filed after the expiration of the period set in the prior Office action. This application will become abandoned unless applicant obtains an extension under 37 CFR 1.136(a). The date on which the notice of appeal, the appeal fee, the petition under 37 CFR 1.136(a), and the petition fee under 37 CFR 1.17(a) are filed will be the date of the reply and also the date for determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply later than the maximum SIX MONTH statutory period or obtain an extension pursuant to 37 CFR 1.136(a) for more than FIVE MONTHS beyond the date of reply set in an Office action.

¶ 12.04 Notice of Appeal Unacceptable - Claims Allowed

The notice of appeal filed on [1] is not acceptable because a notice of allowability was mailed by the Office on [2].

1206 Appeal Brief

37 CFR 1.192. Appellant's brief.

(a) Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such time is later, file a brief in triplicate. The brief must be accompanied by the fee set forth in § 1.17(c) and must set

forth the authorities and arguments on which appellant will rely to maintain the appeal. Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences, unless good cause is shown.

(b) On failure to file the brief, accompanied by the requisite fee, within the time allowed, the appeal shall stand dismissed.

(c) The brief shall contain the following items under appropriate headings and in the order indicated below unless the brief is filed by an applicant who is not represented by a registered practitioner:

(1) *Real party in interest.* A statement identifying the real party in interest, if the party named in the caption of the brief is not the real party in interest.

(2) *Related appeals and interferences.* A statement identifying by number and filing date all other appeals or interferences known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) *Status of claims.* A statement of the status of all the claims, pending or cancelled, and identifying the claims appealed.

(4) *Status of amendments.* A statement of the status of any amendment filed subsequent to final rejection.

(5) *Summary of invention.* A concise explanation of the invention defined in the claims involved in the appeal, which shall refer to the specification by page and line number, and to the drawing, if any, by reference characters.

(6) *Issues.* A concise statement of the issues presented for review.

(7) *Grouping of claims.* For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c)(8) of this section, appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.

(8) *Argument.* The contentions of appellant with respect to each of the issues presented for review in paragraph (c)(6) of this section, and the basis therefor, with citations of the authorities, statutes, and parts of the record relied on. Each issue should be treated under a separate heading.

(i) For each rejection under 35 U.S.C. 112, first paragraph, the argument shall specify the errors in the rejection and how the first paragraph of 35 U.S.C. 112 is complied with, including, as appropriate, how the specification and drawings, if any,

(A) Describe the subject matter defined by each of the rejected claims,

(B) Enable any person skilled in the art to make and use the subject matter defined by each of the rejected claims, and

(C) Set forth the best mode contemplated by the inventor of carrying out his or her invention.

(ii) For each rejection under 35 U.S.C. 112, second paragraph, the argument shall specify the errors in the rejection and how the claims particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(iii) For each rejection under 35 U.S.C. 102, the argument shall specify the errors in the rejection and why the rejected claims are patentable under 35 U.S.C. 102, including any specific limitations in the rejected claims which are not described in the prior art relied upon in the rejection.

(iv) For each rejection under 35 U.S.C. 103, the argument shall specify the errors in the rejection and, if appropriate, the specific limitations in the rejected claims which are not described in the prior art relied on in the rejection, and shall explain how such limitations render the claimed subject matter unobvious over the prior art. If the rejection is based upon a combination of references, the argument shall explain why the references, taken as a whole, do not suggest the claimed subject matter, and shall include, as may be appropriate, an explanation of why features disclosed in one reference may not properly be combined with features disclosed in another reference. A general argument that all the limitations are not described in a single reference does not satisfy the requirements of this paragraph.

(v) For any rejection other than those referred to in paragraphs (c)(8)(i) to (iv) of this section, the argument shall specify the errors in the rejection and the specific limitations in the rejected claims, if appropriate, or other reasons, which cause the rejection to be in error.

(9) *Appendix.* An appendix containing a copy of the claims involved in the appeal.

(d) If a brief is filed which does not comply with all the requirements of paragraph (c) of this section, appellant will be notified of the reasons for non-compliance and provided with a period of one month within which to file an amended brief. If appellant does not file an amended brief during the one-month period, or files an amended brief which does not overcome all the reasons for non-compliance stated in the notification, the appeal will stand dismissed.

Where the brief is not filed, but within the period allowed for filing the brief an amendment is presented which places the application in condition for allowance, the